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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/482,135 01/12/00 REGNIER

K 99-247US

EXAMINER

MM91/1107

Charles S Cohen
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Molex Incorporated
2222 Wellington Court
Lisle IL 60532

BRASAD, C

ART UNIT

PAPER NUMBER

2839
DATE MAILED:

11/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/482,135

Applicant(s)

REGNIER, KENT E

Examiner

Chandrika Prasad

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The reply filed on 10/09/01 consists of changes to the drawings and remarks related to rejection of claims. The claims are not allowable as explained below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-8, 11-20, 22, 23, 25 and 26 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdon et al.

Bourdon (Figures 1-10) shows an electrical connector 1 having a housing 90 with a plurality of cylindrical receptacles, a plurality of cylindrical contact members 20 received in the bores of the receptacle and a plurality of resilient retainers (seals) 30, 40 to provide an ungapped (sealed) connection between the contact members and the receptacles at the location of the retainer. The seals have openings, which fit over the contact. Each receptacle provides a stop surface in the axial direction, and the inside cylindrical surface of the receptacles provide a stop in the radial direction. The retainers abut against these stop surfaces. The contact has two portions on two sides of the retainer, which are within the housing.

But Bourdon does not show a dielectric housing and the contacts arranged in a 1 mm or 0.05 inch grid. It would have been obvious to one having ordinary skill in the art

at the time of the instant invention to make the housing 90 of a dielectric material because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

As to the claims 7 and 8, the instant invention does not provide any reasons or problems to be solved by arranging the contacts in a 1 mm or 0.05 inch grid. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to arrange the contacts in a 1 mm or 0.05 inch grid because this would provide a closely spaced or dense array of contacts, which are presently considered normal for high-density pin connectors.

As to the claim 12, Bourdon does not show the housing made of a plurality of strips. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to make the housing in several parts in the form of strips because it has been held that constructing a formerly integral part in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

4. Claims 5, 9, 10, 21, 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdon et al.

Bourdon shows all the features of these claims as described in Paragraph 4 above except a land at one (mating) end of the contact member and the terminal end being bent to be offset from the axis of the mating end. Official Notice is hereby given that such features of a contact member are well known in the art of electrical connectors. It would have been obvious to one having ordinary skill in the art at the

Art Unit: 2839

time of the instant invention to provide these features to the Bourdon contact member because a land (pad) will provide a larger contact area and the bent terminal end would provide a means to connect to other parts which are offset from the axial direction of the mating end.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Myers et al., Clark and Eifler all show resilient sealing members forming an ungapped condition between the seal members and the contact members to form a sealed connector. Such a feature is well known in the art of electrical connectors.

Response to Arguments

7. Applicant's arguments with respect to claims 1-27 have been considered but are not persuasive. Bourdon clearly shows a resilient seal (retainer) 40 providing an ungapped condition between the seal and the contact member in order to prevent any unwanted material getting into the contact portion.

Contact Information

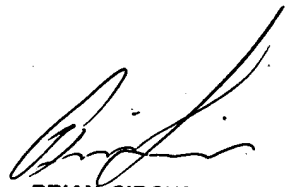
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad whose telephone number is (703) 308-0977.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached at (703) 308-3119. The fax number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or processing should be directed to the Group receptionist whose telephone number is (703) 308-1782.


Chandrika Prasad

October 24, 2001


BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800